

From the Editor

It is with great enthusiasm that I accept the position of editor-in-chief of *Trends in Amplification*. As a long-time reader of this journal, I have watched it grow in stature and expand in scope while remaining true to its original focus on research in auditory amplification, a unique niche that unambiguously distinguishes this journal from others. I realize now that this journal's growth was certainly no accident but was instead a result of the diligence and dedication of Dr. Arlene Neuman, the outgoing editor-in-chief. During the past several years, Dr. Neuman has been the primary driving force behind the journal and has addressed a wide range of topics during her tenure (such as tinnitus and auditory scene analysis) that reflect a truly broad approach to pathological conditions and patient management issues germane to auditory amplification. The fact that this diversity of topics has been embraced by readers of *Trends in Amplification* is critically important to the editorial staff, and we will continue to develop the journal along these lines. This current issue, which represents the last one edited by Dr. Neuman, is yet another example of the high quality of papers that she has compiled. I would personally like to thank Dr. Neuman for all her work over the years, which has led in the aggregate to the significant improvement of the journal as well as recognition throughout the scientific community of the value imparted through its excellent original manuscripts, invited papers, and scientific reviews. I would also like to thank her for her kind support and insight during this period of editorial transition. It is my sincere hope to continue the trajectory of growth for the journal that has been so ably set by Dr. Neuman.

This issue features two interesting articles. The first is a thorough treatment by Drs. Charlotte Reed, Louis Braida, and Patrick Zurek of a fascinating topic—that of suprathreshold deficits in cochlear hearing impairment. In this review, the authors tackle the challenging issue of auditory deficits that are not based on threshold alterations but are instead found in decreased performance on temporal auditory tasks (e.g., gap detection) that control for crucial variables such as relative audibility of the stimulus, stimulus loudness, and participant age. The authors are particularly careful to differentiate between how these potential variables have confounded previous research efforts in the development of a consensus view of the validity and relevance of suprathreshold deficits. In addition to the scholarly and thoughtful review of

literature provided by the authors, they also highlight how much work yet remains to be done to study suprathreshold deficits with proper controls for audibility, level, and age. Equally important are the clinical implications of such deficits, such as auditory integration over time, that are found to differ between individuals with hearing loss and those with normal hearing, independent of stimulus audibility, usually studied by some form of compensation for a given participant's particular auditory thresholds. Ultimately, this review should contribute to our overall understanding of the numerous functional alterations that accompany hearing impairment. Furthermore, these types of studies discourage an oversimplified view of auditory impairment as limited to threshold shifts and encourage further study of factors that affect functional capacity and accuracy of auditory function independent of volume loss.

The second article is an original research paper that deals with a topic of great practical relevance—the evaluation of a telephone captioning system. In this article by Adriana Zekveld and colleagues, the subjective benefit of telephone captioning by an automatic speech recognition system was assessed. Briefly, participants were asked to listen to a story via telephone in the presence of babble noise. The stories were presented either with or without auditory captioning, which was prepared offline prior to the study and presented with a delay to mimic real-time use. Participants completed the NASA Task Load Index and Subjective Rating Scales to assess the benefit provided by the captioning system. Interestingly, the authors arrived at a somewhat surprising result—overall task load between audio only versus audio plus text did not differ for participants. This study suggests that some assistive technologies may offer only limited help for patients, despite their intended benefits. Furthermore, many patients display an unwillingness to use certain technologies, perhaps because of a legitimate concern that the imperfections of these technologies might paradoxically increase the degree of effort involved in a challenging listening situation. Further studies in this vein will be instrumental in establishing both the objective and subjective benefits of new assistive technology for telephone use.

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Editor-in-Chief